

9. SEATTLE–VASHON PASSENGER-ONLY INCLUDING SEATTLE– SOUTHWORTH TRAVEL

The Seattle-Vashon passenger-only ferry provides weekday and Saturday service primarily for commuters and other pedestrians traveling between downtown Seattle and north Vashon Island.⁵ In addition, it provides a connection for foot passengers to/from south Kitsap County via the Southworth – Vashon auto ferry. During the weekday PM peak period, more than half of all westbound Seattle-Vashon passengers transferred at Vashon Island and continued on to Southworth via the Southworth – Vashon ferry. Given the significant number of the transferring passengers, this chapter presents the survey results for this route segmented into those passengers traveling between Seattle and Vashon and those traveling between Seattle and Southworth.

The Seattle – Vashon route is 8.5 nautical miles in length and requires approximately 25 minutes to cross. On an annual basis, ridership averages about 1,015 passengers per day, six days per week. During the survey month of September 1999, average daily ridership was 1,079. The route operates during the AM and PM peak periods, with service suspended during the late morning and midday, and consequently exhibits essentially unidirectional ridership in the peak commute direction. As there is no Sunday service, only weekday PM peak riders were surveyed.

Key trip making information and geographic travel patterns for patrons of this route are presented herein. Additional route-specific survey tabulations and results for all three survey periods, including ferry user demographic information, can be found in Appendix B.

9.1 TRIP MAKING INFORMATION

9.1.1 Weekday Trip Statistics

Weekday trip statistics presented here are grouped into three topics:

- Trip purpose and usage frequency;
- Travel modes and round-trip patterns; and
- Desired transit improvements.

The focus of these results is primarily on the PM peak survey period, contrasting the peak results to the PM non-peak period for key items such as trip purpose and wait times.

Trip Purpose – Vashon Passengers

The trip purpose and frequency for the weekday PM peak period for the Seattle – Vashon route are summarized in Table 9-1. From this table, it is evident that this route serves commuters during the PM peak period. The overriding majority of riders (86%) were traveling during the PM peak for work/school/business purposes. The frequency of use by

⁵ Although provided when the survey was conducted, weekend (Saturday) service is discontinued after June 30, 2000.

exhibited by these PM peak travelers also suggests most are regular users with close to 70% making 10 or more one-way trips during the past 7 days.

Table 9-1
Trip Purpose and Frequency of Use Distribution
Seattle-Vashon Passenger-Only – Weekday PM Peak Period

<i>Frequency of Use / Trip Purpose</i>	<i>Work/School/ Business Related</i>	<i>Medical Appt./ Personal Business/ Other</i>	<i>Social/ Recreational/ Shopping/ Sight-seeing</i>	<i>All Trip Purposes</i>	<i>Expanded Ridership Total</i>
1st Ride in Past 7 Days*	3.7%	12.7%	10.1%	4.8%	15
2 to 5 Rides in Past 7 Days	5.5%	74.5%	50.2%	13.4%	43
6 to 9 Rides in Past 7 Days	18.4%	0.0%	29.5%	18.1%	58
10 or More Rides in Past 7 Days	69.6%	12.7%	0.0%	60.5%	195
No Answer	2.7%	0.0%	10.1%	3.2%	10
Totals	100.0%	100.0%	100.0%	100.0%	322
Overall Trip Purpose Distribution	85.8%	6.3%	7.9%	100.0%	
Expanded Ridership	277	20	25	322	

* 1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 9-2 summarizes the trip purpose and frequency of travelers during the weekday PM non-peak period. Work/school/business was the most common trip purpose for 95% of riders. In general, PM non-peak riders were traveling as frequently as those traveling during the PM peak period. Given the lack of midday and late night service on this route, the similarity of peak and off-peak trip purposes and usage frequency it is not surprising.

Table 9-2
Trip Purpose and Frequency of Use Distribution
Seattle-Vashon Passenger-Only – Weekday PM Non-Peak Period

<i>Frequency of Use / Trip Purpose</i>	<i>Work/School/ Business Related</i>	<i>Medical Appt./ Personal Business/ Other</i>	<i>Social/ Recreational/ Shopping/ Sight-seeing</i>	<i>All Trip Purposes</i>	<i>Expanded Ridership Total</i>
1st Ride in Past 7 Days*	0.0%	0.0%	0.0%	0.0%	0
2 to 5 Rides in Past 7 Days	3.7%	33.3%	0.0%	5.2%	5
6 to 9 Rides in Past 7 Days	14.7%	0.0%	0.0%	13.9%	14
10 or More Rides in Past 7 Days	78.0%	66.7%	0.0%	77.4%	78
No Answer	3.7%	0.0%	0.0%	3.5%	3
Totals	100.0%	100.0%	0.0%	100.0%	100
Overall Trip Purpose Distribution	94.8%	5.2%	0.0%	100.0%	
Expanded Ridership	95	5	0	100	

* 1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Trip origin and destination types by direction are presented in Table 9-3 during the weekday PM peak period. The vast majority of riders were traveling from work/school to their home with most heading westbound to Vashon island.

Table 9-3
Trip Origin and Destination Types by Direction
Seattle-Vashon Passenger-Only – Weekday PM Peak Period

<i>Origin & Destination Types</i>		<i>Destination Shares Across All Origins:</i>			<i>Expanded Ridership Total</i>
<i>Origin Place</i>	<i>Destination Place</i>	<i>Eastbound Trips</i>	<i>Westbound Trips</i>	<i>Both Directions</i>	
Home	Home	0.0%	0.9%	0.8%	3
	Work/School	5.6%	0.9%	1.6%	5
	Other	38.9%	2.8%	7.7%	25
Work/School	Home	50.0%	88.0%	82.8%	267
	Work/School	0.0%	0.0%	0.0%	0
	Other	5.6%	0.0%	0.8%	2
Other	Home	0.0%	6.5%	5.6%	18
	Work/School	0.0%	0.0%	0.0%	0
	Other	0.0%	0.9%	0.8%	3
Totals		100.0%	100.0%	100.0%	322
Travel Direction Distribution		13.7%	86.3%	100.0%	
Expanded Ridership		44	278	322	

Trip Purpose – Transfer Passengers

The trip purpose and frequency during the weekday PM peak period for the passengers traveling between Seattle – Southworth via Vashon island are summarized in Table 9-4. From this table, it is evident that all of these foot passengers making the transfer at Vashon are commuters. All PM peak period riders were traveling for work/school/business purposes and most are frequent users, with over 64% making 10 or more one-way trips during the past 7 days. These results concur with those of 1993, where passengers on the Seattle-Vashon passenger-only and Seattle-Vashon via Southworth routes were mainly commuters who rode the ferry frequently.

Table 9-4
Trip Purpose and Frequency of Use Distribution
Seattle-Southworth via Vashon – Weekday PM Peak Period

<i>Frequency of Use / Trip Purpose</i>	<i>Work/School/ Business Related</i>	<i>Medical Appt./ Personal Business/ Other</i>	<i>Social/ Recreational/ Shopping/ Sight-seeing</i>	<i>All Trip Purposes</i>	<i>Expanded Ridership Total</i>
1st Ride in Past 7 Days*	9.6%	0.0%	0.0%	9.6%	29
2 to 5 Rides in Past 7 Days	10.2%	0.0%	0.0%	10.2%	31
6 to 9 Rides in Past 7 Days	14.7%	0.0%	0.0%	14.7%	45
10 or More Rides in Past 7 Days	64.5%	0.0%	0.0%	64.5%	196
No Answer	0.8%	0.0%	0.0%	0.8%	3
Totals	100.0%	0.0%	0.0%	100.0%	304
Overall Trip Purpose Distribution	100.0%	0.0%	0.0%	100.0%	
Expanded Ridership	304	0	0	304	

* 1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

“The lack of non-commute trip purposes suggests that this commuter-oriented service requiring a transfer at Vashon is not the best alternative for those making trips for social, shopping, recreational, and/or personal appointment reasons...”

Table 9-5 summarizes the trip purpose and frequency of Seattle-Southworth via Vashon travelers during the weekday PM non-peak period. Similar to riders traveling during the PM peak period, work/school/ business was the only trip purpose. In general, riders during the PM non-peak period were traveling as frequently as those traveling during the PM peak period. The lack of non-commute trip purposes suggests that this primarily commuter-oriented service requiring a transfer at Vashon is not the best alternative for those making trips for social, shopping, recreational, and/or personal appointment reasons, particularly since a vehicle may be required for many such trips.

Table 9-5
Trip Purpose and Frequency of Use Distribution
Seattle-Southworth via Vashon – Weekday PM Non-Peak Period

<i>Frequency of Use / Trip Purpose</i>	<i>Work/School/ Business Related</i>	<i>Medical Appt./ Personal Business/ Other</i>	<i>Social/ Recreational/ Shopping/ Sight-seeing</i>	<i>All Trip Purposes</i>	<i>Expanded Ridership Total</i>
1st Ride in Past 7 Days*	11.9%	0.0%	0.0%	11.9%	12
2 to 5 Rides in Past 7 Days	13.6%	0.0%	0.0%	13.6%	14
6 to 9 Rides in Past 7 Days	3.4%	0.0%	0.0%	3.4%	3
10 or More Rides in Past 7 Days	71.2%	0.0%	0.0%	71.2%	73
No Answer	0.0%	0.0%	0.0%	0.0%	0
Totals	100.0%	0.0%	0.0%	100.0%	103
Overall Trip Purpose Distribution	100.0%	0.0%	0.0%	100.0%	
Expanded Ridership	103	0	0	103	

* 1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

The types of trip origins and destinations by direction are presented in Table 9-6 during the weekday PM peak period. The vast majority of riders were traveling from work/school to their home with most heading westbound to Southworth or other points on the Kitsap Peninsula.

Table 9-6
Trip Origin and Destination Types by Direction
Seattle-Southworth via Vashon – Weekday PM Peak Period

<i>Origin & Destination Types</i>		<i>Destination Shares Across All Origins:</i>			<i>Expanded Ridership Total</i>
<i>Origin Place</i>	<i>Destination Place</i>	<i>Eastbound Trips</i>	<i>Westbound Trips</i>	<i>Both Directions</i>	
Home	Home	0.0%	0.9%	0.8%	3
	Work/School	66.2%	0.0%	1.6%	5
	Other	33.8%	0.0%	0.8%	3
Work/School	Home	0.0%	97.7%	95.3%	290
	Work/School	0.0%	0.9%	0.8%	3
	Other	0.0%	0.0%	0.0%	0
Other	Home	0.0%	0.6%	0.6%	2
	Work/School	0.0%	0.0%	0.0%	0
	Other	0.0%	0.0%	0.0%	0
Totals		100.0%	100.0%	100.0%	304
Travel Direction Distribution		2.4%	97.6%	100.0%	
Expanded Ridership		7	297	304	

Travel Modes and Round-Trip Patterns – Vashon Passengers

Table 9-7 summarizes the round-trip patterns and methods for PM peak period Seattle – Vashon passenger-only riders. During the weekday PM peak period, 81% of riders were on the second half of a round-trip, and most of these riders were making both halves of their round-trip in the same day. Those on the first portion of their round-trip when the survey was distributed were asked to predict what travel pattern and method would be employed for the second portion. In contrast to those completing a round-trip, one out of three travelers on the initial trip leg intended to complete their return trip on some other day.

Table 9-7
Round-Trip Patterns and Methods
Seattle-Vashon Passenger-Only – Weekday PM Peak Period

<i>Round-Trip Segment & Method / Time</i>	<i>Today</i>	<i>Some Other Day</i>	<i>No Answer</i>	<i>Expanded Ridership</i>
Declared Initial Trip (Reported on 2nd Half of Round-Trip)				81.4%
Same Ferry Route	65.6%	0.0%	9.8%	197
Not Using Ferry System	2.0%	0.0%	0.0%	5
Different Ferry Route	19.7%	0.0%	2.0%	57
No Answer	0.0%	0.0%	1.0%	3
<i>Total Declared Initial Trip</i>	<i>87.3%</i>	<i>0.0%</i>	<i>12.7%</i>	<i>262</i>
Expected Return Trip (Reported on 1st Half of Round-Trip)				18.0%
Same Ferry Route	47.9%	21.8%	4.2%	43
Not Using Ferry System	4.5%	0.0%	0.0%	3
Different Ferry Route	12.7%	8.9%	0.0%	13
No Answer	0.0%	0.0%	0.0%	.
<i>Total Expected Return Trip</i>	<i>65.0%</i>	<i>30.7%</i>	<i>4.2%</i>	<i>58</i>
No Answer (Did Not Report Round-Trip Status)				0.6%
<i>No Answer</i>			<i>100.0%</i>	<i>2</i>
Expanded Ridership Total	266	18	38	322

Access and egress mode shares and boarding mode distributions from the 1993 survey were modified to approximate 1999 Travel Survey methods and data collection procedures for comparison purposes. However, the 1993 results are not directly comparable to the expanded survey results based upon the data collected in 1999. Please see Section 3.5.2 in Chapter 3 for a detailed explanation of how the boarding mode numbers differ.

Furthermore, note that in 1993 results were presented for all patrons on the Seattle-Vashon passenger-only ferry whereas in 1999 the results have been divided between those making a transfer at Vashon and those not. This further affects the comparability to the earlier survey. Nonetheless, generalized comparisons are made in the following discussion where relevant.

Table 9-8 presents the access and egress modes to the ferry, along with the boarding method for PM peak period Seattle-Vashon passenger-only patrons. Unlike other south Sound routes, most passengers on this route either walked or bicycled to the ferry. This reflects the unidirectional nature of PM peak travel on this route and the variety of trip origins within walking distance of the Seattle Pier 50 terminal. In contrast, the number of riders leaving the ferry terminal as a pedestrian or bicyclist was much less than those accessing the terminal, since most of the PM peak travelers were alighting at Vashon. Almost half the riders used a vehicle to egress the terminal and just over one-third left by bus or shuttle. A fairly small number of passengers boarded the ferry with a bicycle – just over 3%.

Table 9-8
Access Mode to Ferry – Boarding Method – Egress Mode from Ferry
Seattle-Vashon Passenger-Only – Weekday PM Peak Period

<i>Access Mode to Ferry Terminal</i>	<i>Percent Distrib.</i>	<i>Boarding Method</i>	<i>Percent Distrib.</i>	<i>Mode Shares</i>	<i>Egress Mode from Ferry Terminal</i>	<i>Percent Distrib.</i>
Pedestrian/Bicycle	63.8%	Walked-On100.0%			Pedestrian/Bicycle	17.3%
By Vehicle*	14.8%	Pedestrian	96.9%		By Vehicle*	46.2%
By Bus or Shuttle	21.4%	Pedestrian w/ Bicycle	3.1%		By Bus or Shuttle	36.5%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	N/A	In-VehicleN/A			In-Vehicle	N/A
Total				100.0%		
Expanded Ridership Total				322		
* includes motorcycles						

In Table 9-9, the wait time by boarding method is summarized for the weekday PM peak period for the Seattle-Vashon passenger-only route. Just over half of the riders waited zero to 10 minutes, and approximately 38% waited 11 to 30 minutes.

Similarly, in Table 9-10, the wait time by boarding method is presented for the weekday PM non-peak period. Interestingly, a higher percentage of passengers between Seattle and Vashon (60%) waited 10 minutes or less than did during the weekday PM peak. However, like the PM peak riders, the vast majority of all passengers waited 30 minutes or less.

Table 9-9
Wait Time Distribution by Boarding Method
Seattle-Vashon Passenger-Only – Weekday PM Peak Period

<i>Wait Time Category / Boarding Method</i>	<i>Walk Board (Pedestrian & Bicycle)</i>	<i>Vehicle Board (Driver & Passenger)</i>	<i>Expanded Ridership Total</i>
Zero to 10 Minutes	53.9%	NA	174
11 to 30 Minutes	38.2%	NA	123
31 to 60 Minutes	4.8%	NA	15
61 to 90 Minutes	0.8%	NA	3
More Than 90 Minutes	0.8%	NA	2
No Answer	1.6%	NA	5
Totals	100.0%	NA	
Expanded Ridership	322	NA	322

Table 9-10
Wait Time Distribution by Boarding Method
Seattle-Vashon Passenger-Only – Weekday PM Non-Peak Period

<i>Wait Time Category / Boarding Method</i>	<i>Walk Board (Pedestrian & Bicycle)</i>	<i>Vehicle Board (Driver & Passenger)</i>	<i>Expanded Ridership Total</i>
Zero to 10 Minutes	60.0%	NA	60
11 to 30 Minutes	36.6%	NA	37
31 to 60 Minutes	1.7%	NA	2
61 to 90 Minutes	1.7%	NA	2
More Than 90 Minutes	0.0%	NA	0
No Answer	0.0%	NA	0
Totals	100.0%	0.0%	
Expanded Ridership	100	NA	100

Table 9-11 lists the type of parking used by ferry riders that boarded as pedestrians during the weekday PM peak period on the Seattle-Vashon passenger-only route. It appears that approximately 10% used some sort of parking on both sides, thus these riders probably had a car available on each side of this route. The remaining riders received free parking on one side (Vashon) and did not park on other side (Seattle), or did not park on either side.

Table 9-11
Walk-Board Passenger Parking Statistics
Seattle-Vashon Passenger-Only – Weekday PM Peak Period

<i>Reported Parking Characteristics</i>	<i>Expanded Ridership</i>	<i>Percent of Total</i>	<i>Average Total Parking Paid*</i>
Used Paid Parking on Both Sides	0	0.0%	N/A
Used Paid Parking One Side & Free Parking Other Side	10	3.2%	\$1.81
Used Free Parking on Both Sides	23	7.2%	\$0.00
Paid Parking One Side & Did Not Park Other Side or Insufficient Information	5	1.6%	\$0.45
Free Parking One Side & Did Not Park Other Side or Insufficient Information	144	44.6%	\$0.00
Did Not Park on Either Side or Insufficient Parking Information	140	43.5%	NA
Totals	322	100.0%	

*Only surveys with a reported dollar amount paid for parking were included in the average cost calculation (those with free parking were excluded).

Travel Modes and Round-Trip Patterns – Transfer Passengers

Table 9-12 summarizes the round-trip patterns and methods for the PM peak period passengers traveling between Seattle and Southworth via Vashon. During the weekday PM peak period, close to 95% of the respondents were on the second half of their round-trip, and nearly all had made the first half earlier that day. For those who were on the first portion of their round-trip during the PM peak survey period, about half indicated that they would complete the round-trip on a different day.

Table 9-12
Round-Trip Patterns and Methods
Seattle-Southworth via Vashon – Weekday PM Peak Period

<i>Round-Trip Segment & Method / Time</i>	<i>Today</i>	<i>Some Other Day</i>	<i>No Answer</i>	<i>Expanded Ridership</i>
Declared Initial Trip (Reported on 2nd Half of Round-Trip)				94.9%
Same Ferry Route	76.1%	0.0%	8.0%	243
Not Using Ferry System	0.0%	0.0%	0.0%	0
Different Ferry Route	15.9%	0.0%	0.0%	46
No Answer	0.0%	0.0%	0.0%	0
<i>Total Declared Initial Trip</i>	<i>92.0%</i>	<i>0.0%</i>	<i>8.0%</i>	<i>289</i>
Expected Return Trip (Reported on 1st Half of Round-Trip)				5.1%
Same Ferry Route	33.0%	33.5%	0.0%	10
Not Using Ferry System	0.0%	0.0%	0.0%	0
Different Ferry Route	16.7%	0.0%	0.0%	3
No Answer	0.0%	16.7%	0.0%	3
<i>Total Expected Return Trip</i>	<i>49.8%</i>	<i>50.2%</i>	<i>0.0%</i>	<i>15</i>
No Answer (Did Not Report Round-Trip Status)				0.0%
<i>No Answer</i>			<i>100.0%</i>	<i>0</i>
Expanded Ridership Total	273	8	23	304

The ferry terminal access and egress modes and boarding method for the Seattle-Southworth via Vashon passengers are presented in Table 9-13 for the PM peak period. More than half walked or bicycled to the ferry, reflecting the overwhelming Seattle to Southworth travel direction in the PM peak and the large number of origins within walking distance of the Pier 50 terminal. Not surprisingly then, the share of riders leaving the ferry terminal as a pedestrian or bicyclist was much less than those accessing the terminal, since most passengers alighted on Vashon island in the PM peak period. Over half (59%) used a vehicle after departing the ferry and just less than one-third left by bus or shuttle. A fairly small number of passengers traveled on the ferry with a bicycle – 1.7%.

By aggregating both the Seattle-Southworth via Vashon and the Seattle-Vashon passenger-only results, they can be compared to the 1993 survey results for the Seattle-Vashon route (which did not distinguish transferees.) In 1999, 21% of walk-on riders accessed the ferry terminal by bus or shuttle, up from 8.4% of walk-on riders in 1993. As far as leaving the ferry terminal, 8% left via bus/shuttle in 1993 and this percentage increased to 34% in 1999.

Table 9-13
Access Mode to Ferry – Boarding Method – Egress Mode from Ferry
Seattle-Southworth via Vashon – Weekday PM Peak Period

<i>Access Mode to Ferry Terminal</i>	<i>Percent Distrib.</i>	<i>Boarding Method</i>	<i>Percent Distrib.</i>	<i>Mode Shares</i>	<i>Egress Mode from Ferry Terminal</i>	<i>Percent Distrib.</i>
Pedestrian/Bicycle	60.9%	Walked-On100.0%			Pedestrian/Bicycle	10.2%
By Vehicle*	18.7%	Pedestrian	98.3%		By Vehicle*	59.0%
By Bus or Shuttle	20.4%	Pedestrian w/ Bicycle	1.7%		By Bus or Shuttle	30.8%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	N/A	In-VehicleN/A			In-Vehicle	N/A
Total				100.0%		
Expanded Ridership Total				304		
* includes motorcycles						

Table 9-14 summarizes the wait time by boarding method for Seattle-Southworth travelers during the weekday PM peak period. Just about half of the riders waited 10 minutes or less. Most of the remaining riders waited 11 to 30 minutes. The same distribution for weekday PM non-peak riders is summarized in Table 9-15. No one waited more than 30 minutes.

Table 9-14
Wait Time Distribution by Boarding Method
Seattle-Southworth via Vashon – Weekday PM Peak Period

<i>Wait Time Category / Boarding Method</i>	<i>Walk Board (Pedestrian & Bicycle)</i>	<i>Vehicle Board (Driver & Passenger)</i>	<i>Expanded Ridership Total</i>
Zero to 10 Minutes	47.9%	NA	146
11 to 30 Minutes	44.7%	NA	136
31 to 60 Minutes	5.1%	NA	15
61 to 90 Minutes	0.0%	NA	0
More Than 90 Minutes	0.0%	NA	0
No Answer	2.3%	NA	7
Totals	100.0%	NA	
Expanded Ridership	304	NA	304

Table 9-15
Wait Time Distribution by Boarding Method
Seattle-Southworth via Vashon – Weekday PM Non-Peak Period

<i>Wait Time Category / Boarding Method</i>	<i>Walk Board (Pedestrian & Bicycle)</i>	<i>Vehicle Board (Driver & Passenger)</i>	<i>Expanded Ridership Total</i>
Zero to 10 Minutes	42.4%	NA	44
11 to 30 Minutes	49.1%	NA	51
31 to 60 Minutes	0.0%	NA	0
61 to 90 Minutes	0.0%	NA	0
More Than 90 Minutes	0.0%	NA	0
No Answer	8.5%	NA	9
Totals	100.0%	0.0%	
Expanded Ridership	103	NA	103

Table 9-16 lists the type of parking used by ferry riders that boarded as pedestrians during the weekday PM peak period on the Seattle-Southworth via Vashon route. Most Seattle-Southworth riders parked on at least one side, with Southworth parking more prevalent. It appears that over 20% used some sort of parking on both sides, implying the availability of a vehicle both ends of the route. This result appears to be somewhat inconsistent with the reported access and egress mode results considering the Seattle walk access/egress percentages; however, it is possible that some travelers indicated walk access or egress because they were walking to a parking facility outside the immediate ferry terminal area.

Table 9-16
Walk-Board Passenger Parking Statistics
Seattle-Southworth via Vashon – Weekday PM Peak Period

<i>Reported Parking Characteristics</i>	<i>Expanded Ridership</i>	<i>Percent of Total</i>	<i>Average Total Parking Paid*</i>
Used Paid Parking on Both Sides	45	14.7%	\$2.97
Used Paid Parking One Side & Free Parking Other Side	4	1.4%	\$2.40
Used Free Parking on Both Sides	23	7.6%	\$0.00
Paid Parking One Side & Did Not Park Other Side or Insufficient Information	72	23.5%	\$1.39
Free Parking One Side & Did Not Park Other Side or Insufficient Information	78	25.6%	\$0.00
Did Not Park on Either Side or Insufficient Parking Information	83	27.1%	NA
Totals	304	100.0%	

*Only surveys with a reported dollar amount paid for parking were included in the average cost calculation (those with free parking were excluded).

Desired Transit Improvements – Vashon Passengers

Table 9-17 lists the desired transit improvements of riders on the Seattle-Vashon passenger – only route during the weekday PM peak period. The responses for this route were distributed fairly evenly among all the options. Transit service within two blocks of the rider’s origin or destination was the popular response with over 17% of all passengers. Other improvements received similar shares – employer paid parking with 16% and service at both ends of the ferry route with 14% of the responses. Similar to other routes the most frequent write-in comment was for free or lower park & ride parking fees.

Table 9-17
Transit Improvements Desired
Seattle-Vashon Passenger-Only – Weekday PM Peak Period

<i>Transit Improvement</i>	<i>Distribution</i>	<i>Expanded Ridership</i>
Service within 2 Blocks of Origin or Destination	16.6%	53
Service at Both Ends of Ferry Route	14.0%	45
Seamless Connection between Ferry & Bus	11.8%	38
Employer Paid or Subsidized Bus Pass	16.3%	53
More Park & Ride Lots/Spaces Available	12.6%	41
None of the Above/No Answer	15.1%	49
<i>Frequent Write-In Comments</i>		
More Passenger Only Service	0.0%	0
Lower Park & Ride Parking Fees/Free	7.2%	23
More Park & Ride Information	0.0%	0
"Other" Comments	6.3%	20
Totals	100.0%	322

Table 9-18 lists the priority of transit improvements for those riders that traveled on the Seattle-Vashon passenger-only route during the weekday PM non-peak period. The most popular answer was to provide service closer to respondents’ origins or destinations with a 33% share of the total, which was higher than the percentage for the PM peak period (17%). This may reflect different travel patterns of off-peak users or different levels of existing transit service during off-peak times. The second most common answer was for employer paid or subsidized bus passes with 22% of the total. Similar to other routes, the most frequent write-in response was for free or lower park & ride parking fees.

Table 9-18
Transit Improvements Desired
Seattle-Vashon Passenger-Only – Weekday PM Non-Peak Period

<i>Transit Improvement</i>	<i>Distribution</i>	<i>Expanded Ridership</i>
Service within 2 Blocks of Origin or Destination	32.4%	32
Service at Both Ends of Ferry Route	6.4%	6
Seamless Connection between Ferry & Bus	10.2%	10
Employer Paid or Subsidized Bus Pass	21.8%	22
More Park & Ride Lots/Spaces Available	6.7%	7
None of the Above/No Answer	12.2%	12
<i>Frequent Write-In Comments</i>		
More Passenger Only Service	0.0%	0
Lower Park & Ride Parking Fees/Free	8.7%	9
More Park & Ride Information	0.0%	0
"Other" Comments	1.7%	2
Totals	100.0%	100

Desired Transit Improvements – Transfer Passengers

Listed in Table 9-19 are the desired transit improvements for passengers traveling between Seattle and Southworth via Vashon during the PM peak period. Similar to other routes, service within two blocks of a rider's origin or destination was the most popular response with one-fifth of the total riders. The most frequent write-in comment was for free or lower park & ride parking fees.

Similarly, Table 9-20 summarizes the desired transit improvements of off-peak Seattle-Southworth via Vashon passengers. The most popular improvement was for transit service closer to riders' origins and destinations (approximately 23%). Seamless connections between ferry and bus was another common response with one-fifth of the total. Similar to other routes, the most frequent write-in comment was for free or lower park & ride parking fees.

Table 9-19
Transit Improvements Desired
Seattle-Southworth via Vashon – Weekday PM Peak Period

<i>Transit Improvement</i>	<i>Distribution</i>	<i>Expanded Ridership</i>
Service within 2 Blocks of Origin or Destination	20.4%	62
Service at Both Ends of Ferry Route	10.4%	32
Seamless Connection between Ferry & Bus	13.0%	39
Employer Paid or Subsidized Bus Pass	11.3%	34
More Park & Ride Lots/Spaces Available	12.8%	39
None of the Above/No Answer	20.4%	62
<i>Frequent Write-In Comments</i>		
More Passenger Only Service	0.0%	0
Lower Park & Ride Parking Fees/Free	10.8%	33
More Park & Ride Information	0.0%	0
"Other" Comments	0.8%	3
Totals	100.0%	304

Table 9-20
Transit Improvements Desired
Seattle-Southworth via Vashon – Weekday PM Non-Peak Period

<i>Transit Improvement</i>	<i>Distribution</i>	<i>Expanded Ridership</i>
Service within 2 Blocks of Origin or Destination	22.9%	24
Service at Both Ends of Ferry Route	10.7%	11
Seamless Connection between Ferry & Bus	20.1%	21
Employer Paid or Subsidized Bus Pass	3.9%	4
More Park & Ride Lots/Spaces Available	11.9%	12
None of the Above/No Answer	8.5%	9
<i>Frequent Write-In Comments</i>		
More Passenger Only Service	0.0%	0
Lower Park & Ride Parking Fees/Free	20.4%	21
More Park & Ride Information	0.0%	0
"Other" Comments	1.7%	2
Totals	100.0%	103

9.2 GEOGRAPHIC TRAVEL PATTERNS

This section provides tables and map figures which present the locations for ferry user trip origins and destinations. Of key interest for updating the WSF travel demand forecasting model are the PM peak period origin-destination (O-D) trip tables by travel direction, presented as expanded PM peak ridership volumes and distributions for walk-on passenger movements between Seattle and Vashon as well as Seattle and Southworth via Vashon. Complementing the PM peak period trip tables are two sets of map figures. The first set shows the geographic flows of origins and destinations, including route district percentage distributions, for all trips by direction. The second set of maps illustrates the directional densities of trip origins and destinations.

9.2.1 Weekday PM Peak Period Trip Patterns

Not surprisingly given the commuter nature of this passenger-only route, the Seattle CBD was the most frequent origin for westbound Seattle-Vashon travel during the weekday PM peak period with 68% of the total trips (see Table 9-21 and Figure 9-1). The North Vashon district captured a majority of the destinations. Interestingly, the Ballard/Green Lake/North Seattle/Sand Point district was the most popular destination for PM peak eastbound travel (33% of trips), edging out the Seattle CBD by five percentage points as seen in Table 9-22 and Figure 7-2.

Figure 9-3 provides a spatial display of westbound PM peak period trip origins and destinations for the Seattle-Vashon route, while Figure 9-4 presents the same information except for eastbound travel. As expected, the origins and destinations were concentrated around the ferry terminals on each side (though particularly so in Seattle) given the number of patrons accessing/egressing the ferry as a pedestrian, bicyclist or bus rider.

Table 9-23 and Figure 9-5 summarize the origins and destinations for the Seattle-Southworth via Vashon passengers traveling westbound during the PM peak period. The Seattle CBD was the most popular origin at just over 84% of all trips, and the Other South Kitsap County district was the most popular destination with almost 91% of the trips. Information on trip origins and destinations for eastbound travel during the PM peak for this route can be found in Table 9-24 and Figure 9-6. The Seattle CBD was the most popular destination with just over 66% of the trips and the Queen Anne/Lake Union/Magnolia district captured the remaining trips. Other South Kitsap County was the only origin district (100% of the trips). The trip origins and destinations were displayed spatially for westbound and eastbound travel in Figure 9-7 and Figure 9-8, respectively. The westbound trips were more concentrated around the Seattle CBD and more dispersed on the Kitsap Peninsula. It is difficult to make any conclusions regarding the eastbound trips, as the number of trips was so small during the PM peak period from Southworth to Seattle.

By combining the results from Seattle-Vashon passenger-only and Seattle-Southworth via Vashon, comparisons can be drawn between 1993 and 1999. In 1993, the Seattle CBD was the most popular origin with 78% for westbound travel, and it was the most frequent destination with 56% of the total for eastbound travel. In 1999, the percents for the Seattle CBD declined slightly to 76% for westbound travel and 31% for eastbound travel. The

combined geographic distribution of Seattle-Vashon and Seattle-Southworth PM peak period trip origins and destinations by direction are also presented at the end of this chapter. Figure 9-9 presents the westbound combination of island and Kitsap county travel represented in Figure 9-3 and Figure 9-7, whereas Figure 9-10 presents the eastbound combination of Figure 9-4 and Figure 9-8.

Table 9-21
Seattle-Vashon Passenger-Only O-D Trip Table
Weekday PM Peak Period – Westbound – Vashon Passengers

	DESTINATION			Origin Totals	Origin Shares
		North Vashon Island 4701	South Vashon Island 4702		
ORIGIN					
Seattle CBD	4710	116	72	188	68.2%
Capitol Hill	4711	5	8	13	4.7%
Queen Anne-Lake Union/Magnolia	4712	5	13	18	6.5%
University District	4713	21	5	26	9.3%
Ballard-Green Lake/North Seattle/Sand Point	4714	3		3	0.9%
Seattle Industrial Area	4715	8	8	15	5.6%
Other West King County	4716	8	3	10	3.7%
All Other Places	4717		3	3	0.9%
Destination Totals		165	111	276	100.0%
Destination Shares		59.8%	40.2%	100.0%	

Figure 9-1
Seattle - Vashon Westbound PM Peak Trips
Walk-on Passengers Only

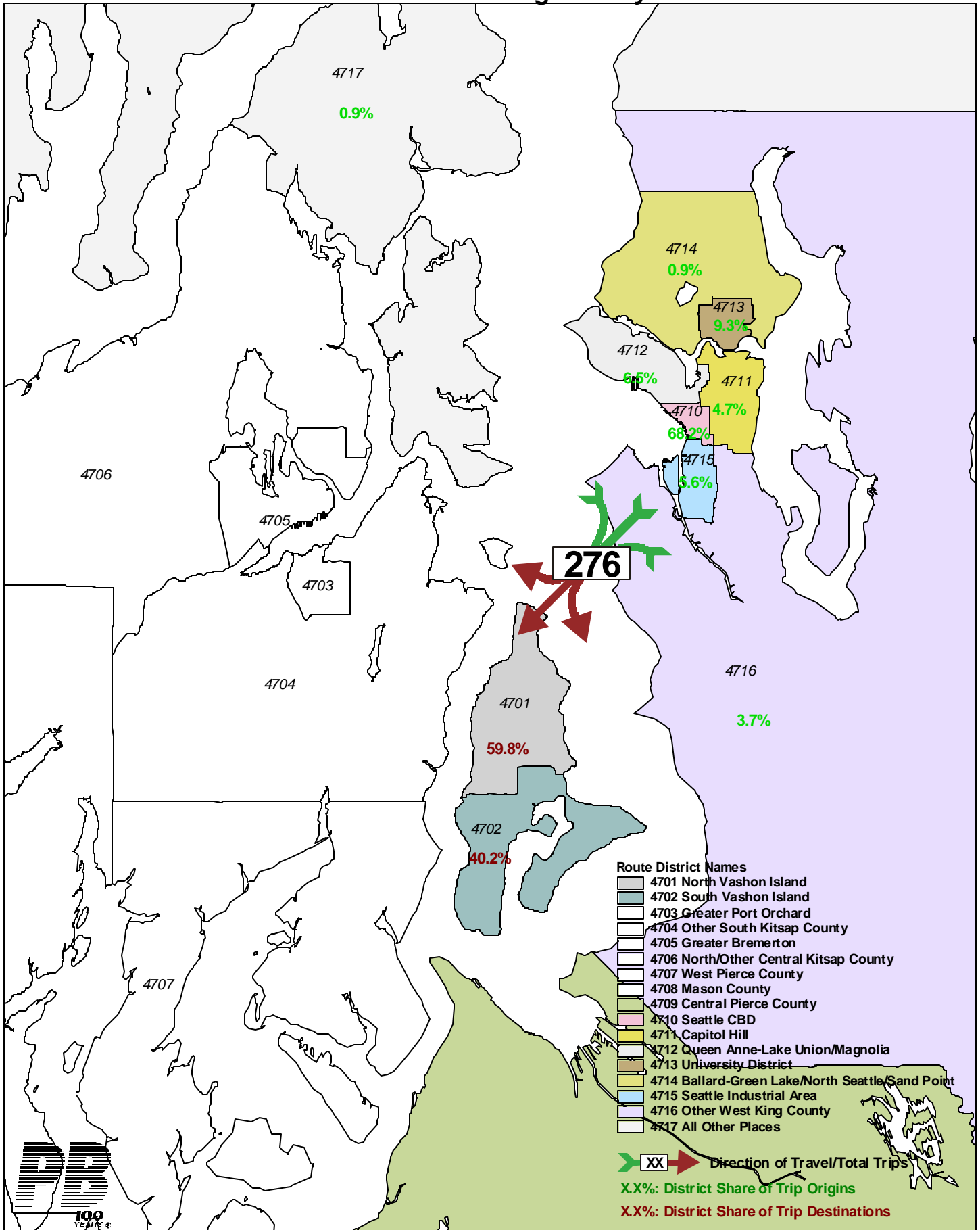


Table 9-22
Seattle-Vashon Passenger-Only O-D Trip Table
Weekday PM Peak Period – Eastbound – Vashon Passengers

ORIGIN	DESTINATION							Origin Totals	Origin Shares
		Seattle CBD 4710	Capitol Hill 4711	Queen Anne-Lake Union/Magnolia 4712	University District 4713	Ballard-Green Lake/North Seattle/Sand Point 4714	Seattle Industrial Area 4715	Other West King County 4716	
North Vashon Island	4701	5	2	5		7		2	22 50.0%
South Vashon Island	4702	7	2		2	7	2		22 50.0%
Destination Totals		12	5	5	2	15	2	2	44 100.0%
Destination Shares		27.8%	11.1%	11.1%	5.6%	33.3%	5.6%	5.6%	100.0%

Figure 9-2
Seattle - Vashon Eastbound PM Peak Trips
Walk-on Passengers Only

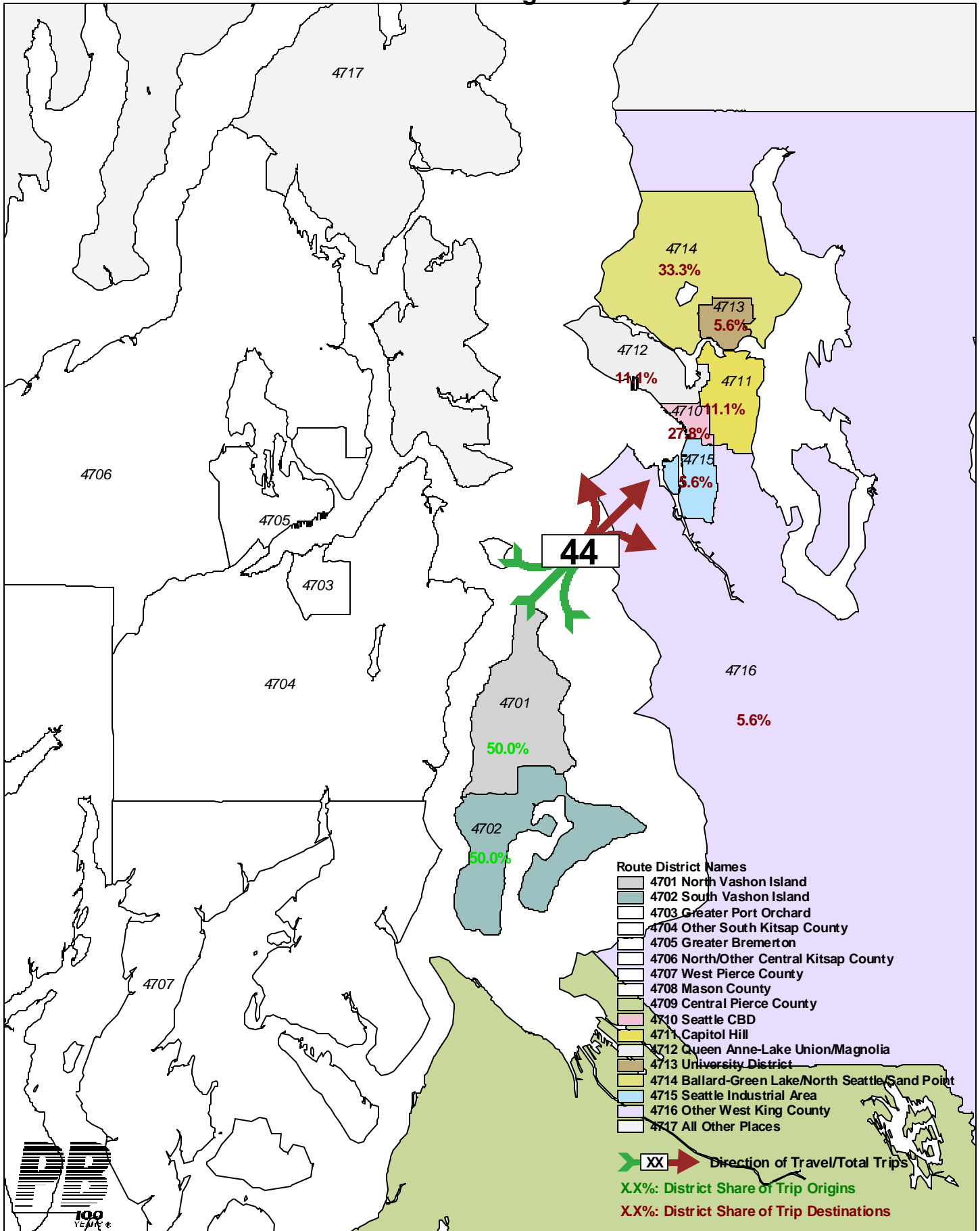


Figure 9-3
Seattle - Vashon (Passenger Only) Westbound PM Peak Period
Trip Origins & Destinations

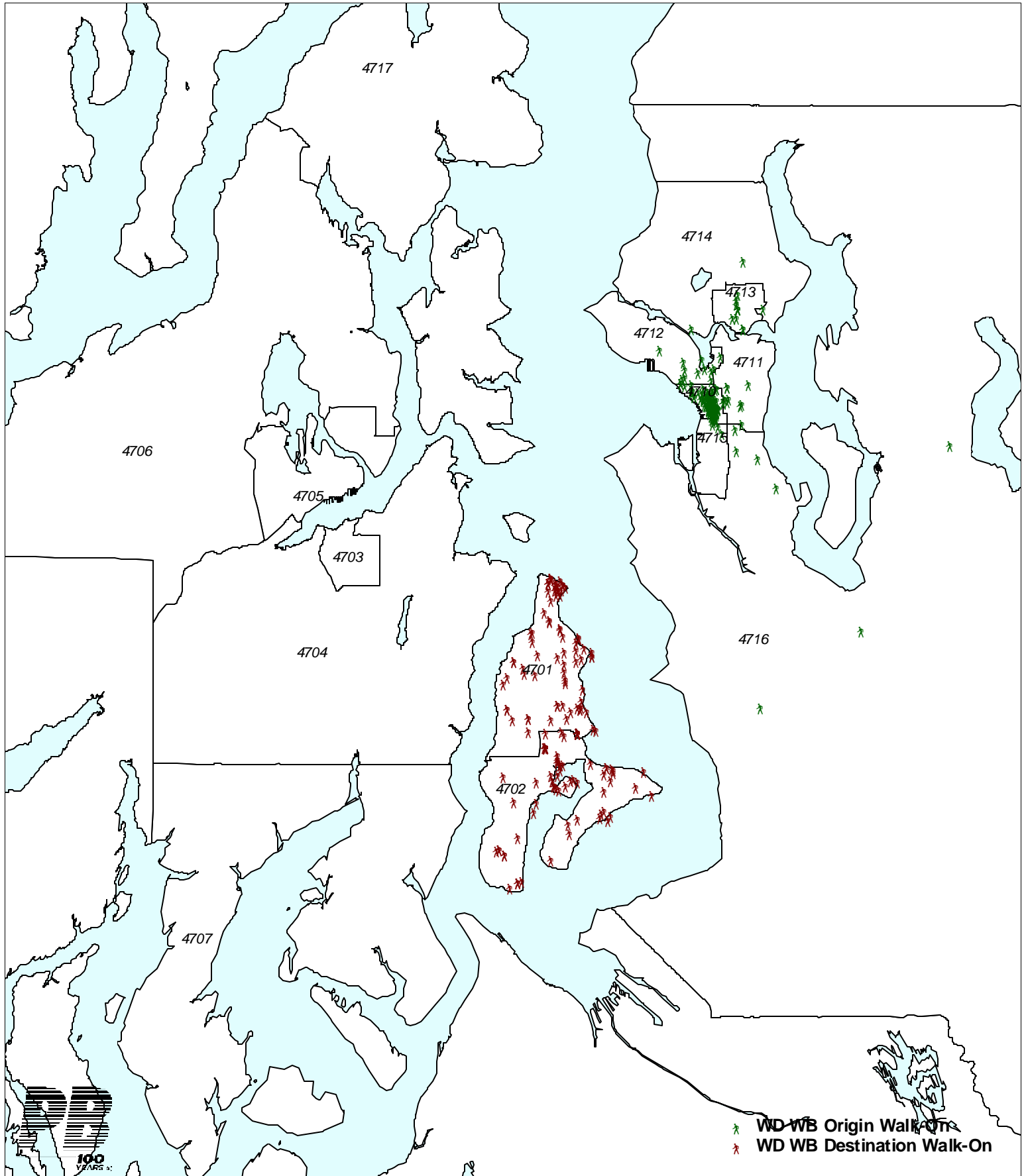


Figure 9-4
Seattle - Vashon (Passenger Only) Eastbound PM Peak Period
Trip Origins & Destinations

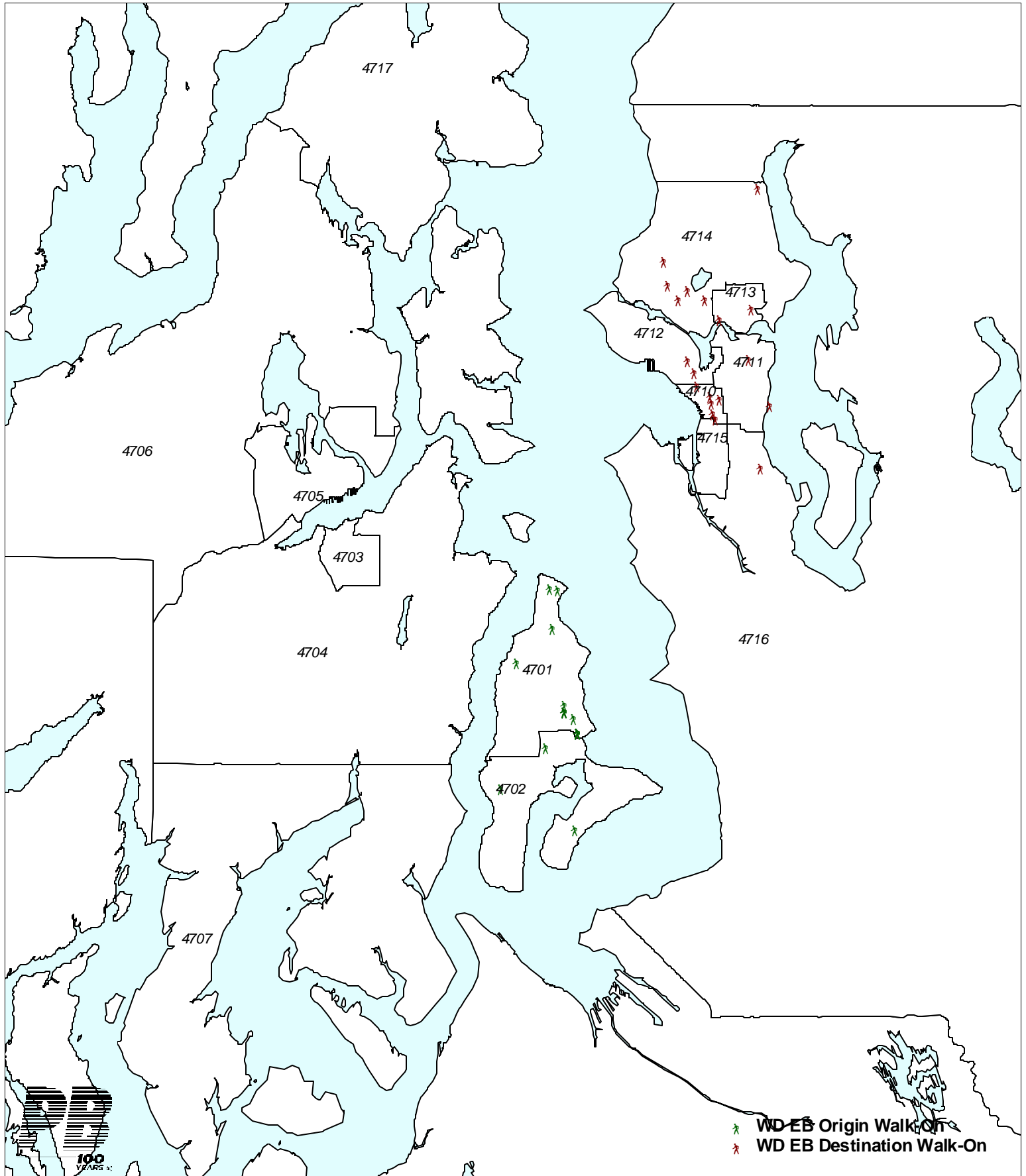


Table 9-23
Seattle-Southworth via Vashon O-D Trip Table
Weekday PM Peak Period – Westbound – Transfer Passengers

	DESTINATION					Origin Totals	Origin Shares
		Greater Port Orchard 4703	Other South Kitsap County 4704	West Pierce County 4707	All Other Places 4717		
ORIGIN							
Seattle CBD	4710	10	222	15	3	250	84.3%
Capitol Hill	4711		5			5	1.7%
Queen Anne-Lake Union/Magnolia	4712		15			15	4.9%
University District	4713		8			8	2.6%
Ballard-Green Lake/North Seattle/Sand Point	4714		4			4	1.5%
Seattle Industrial Area	4715		15			15	4.9%
Destination Totals		10	269	15	3	297	100.0%
Destination Shares		3.5%	90.7%	4.9%	0.9%	100.0%	

Figure 9-5
Seattle - Southworth via Vashon Westbound PM Peak Trips
Walk-on Passengers Only

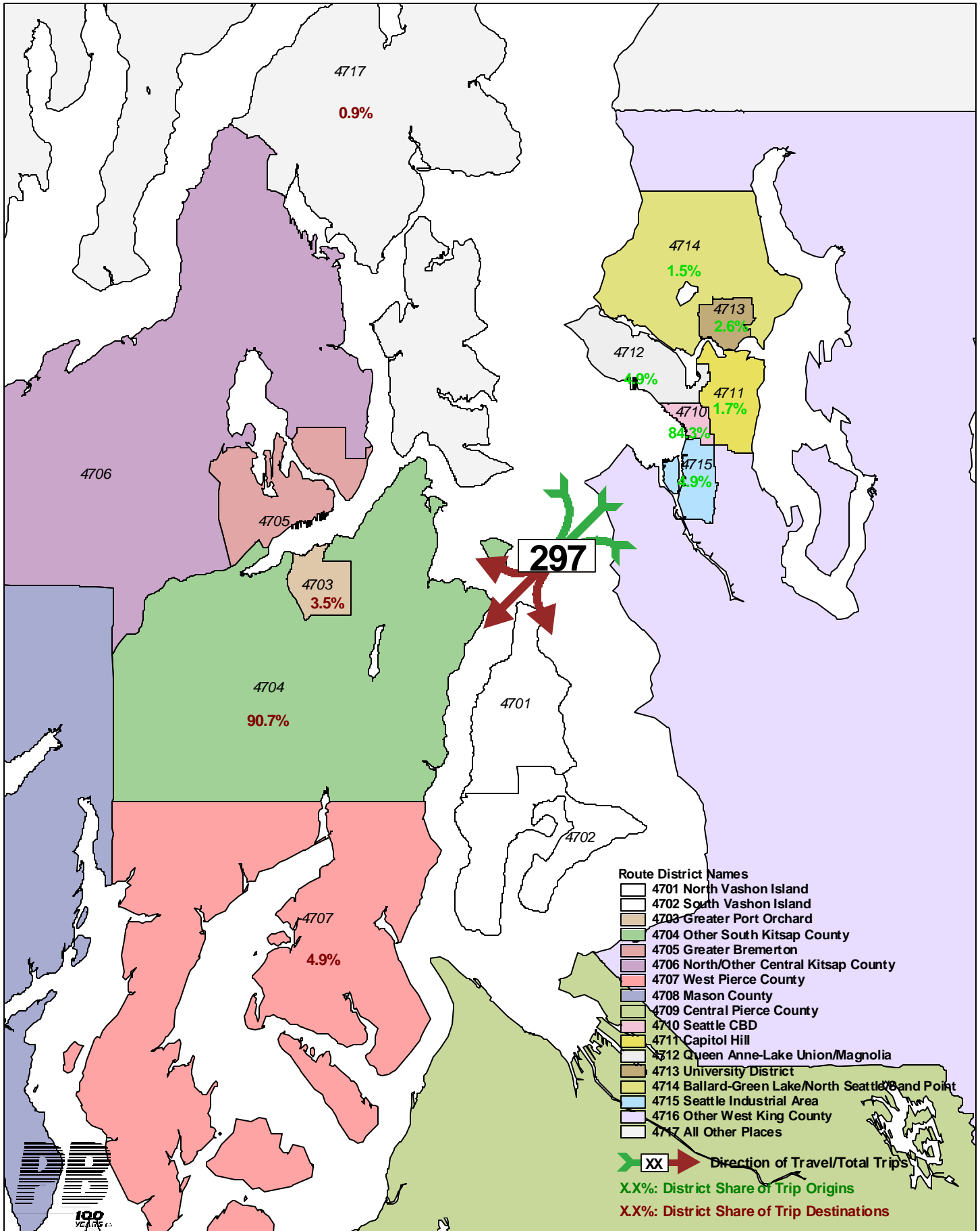


Table 9-24
Seattle-Southworth via Vashon O-D Trip Table
Weekday PM Peak Period – Eastbound – Transfer Passengers

	DESTINATION			Origin Totals	Origin Shares
		Seattle CBD 4710	Queen Anne-Lake Union/Magnolia 4712		
ORIGIN					
Other South Kitsap County	4704	5	3	7	100.0%
Destination Totals		5	3	7	100.0%
Destination Shares		66.2%	33.8%	100.0%	

Figure 9-6
Seattle - Southworth via Vashon Eastbound PM Peak Trips
Walk-on Passengers Only

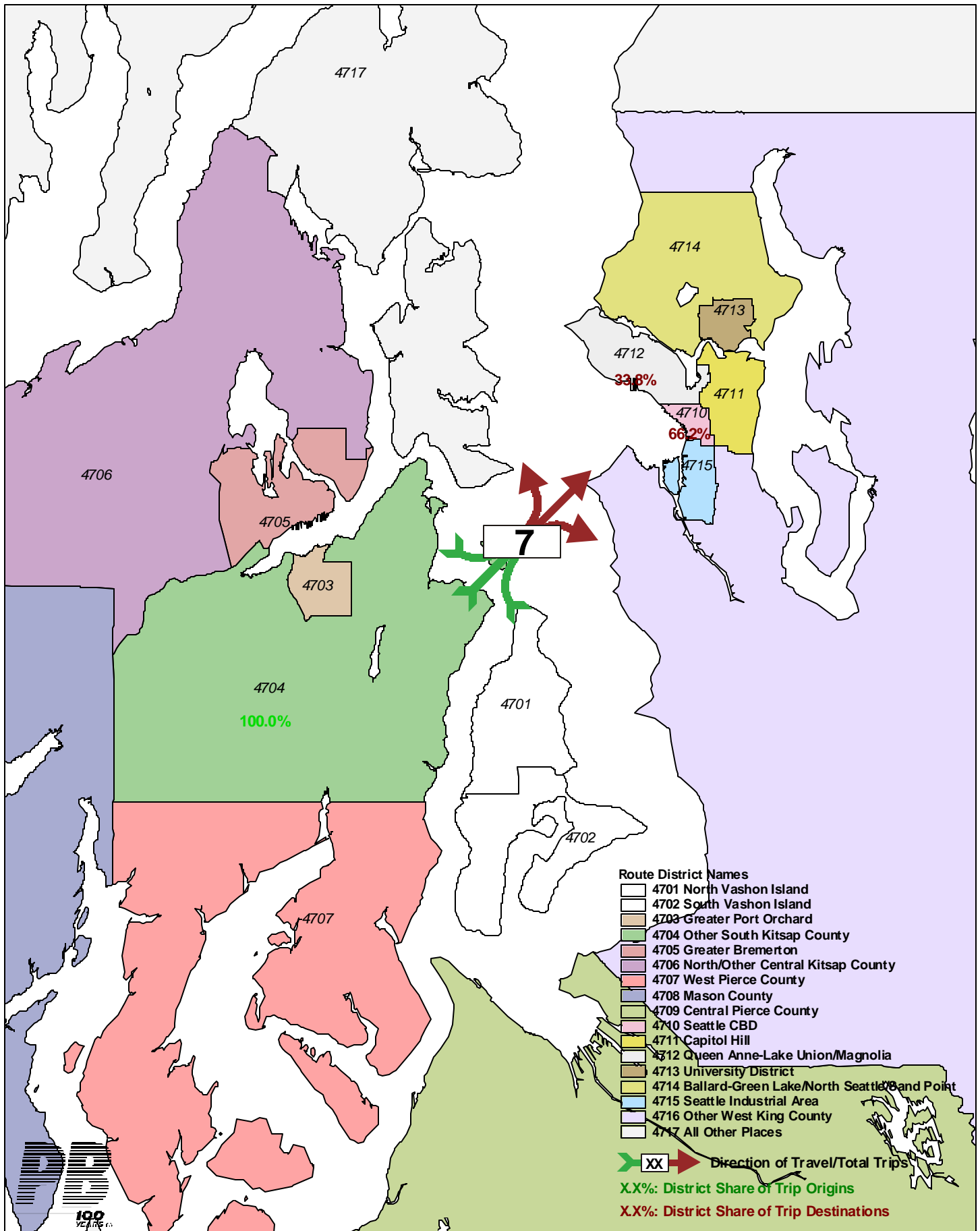


Figure 9-7
Seattle - Southworth via Vashon Westbound PM Peak Period
Trip Origins & Destinations

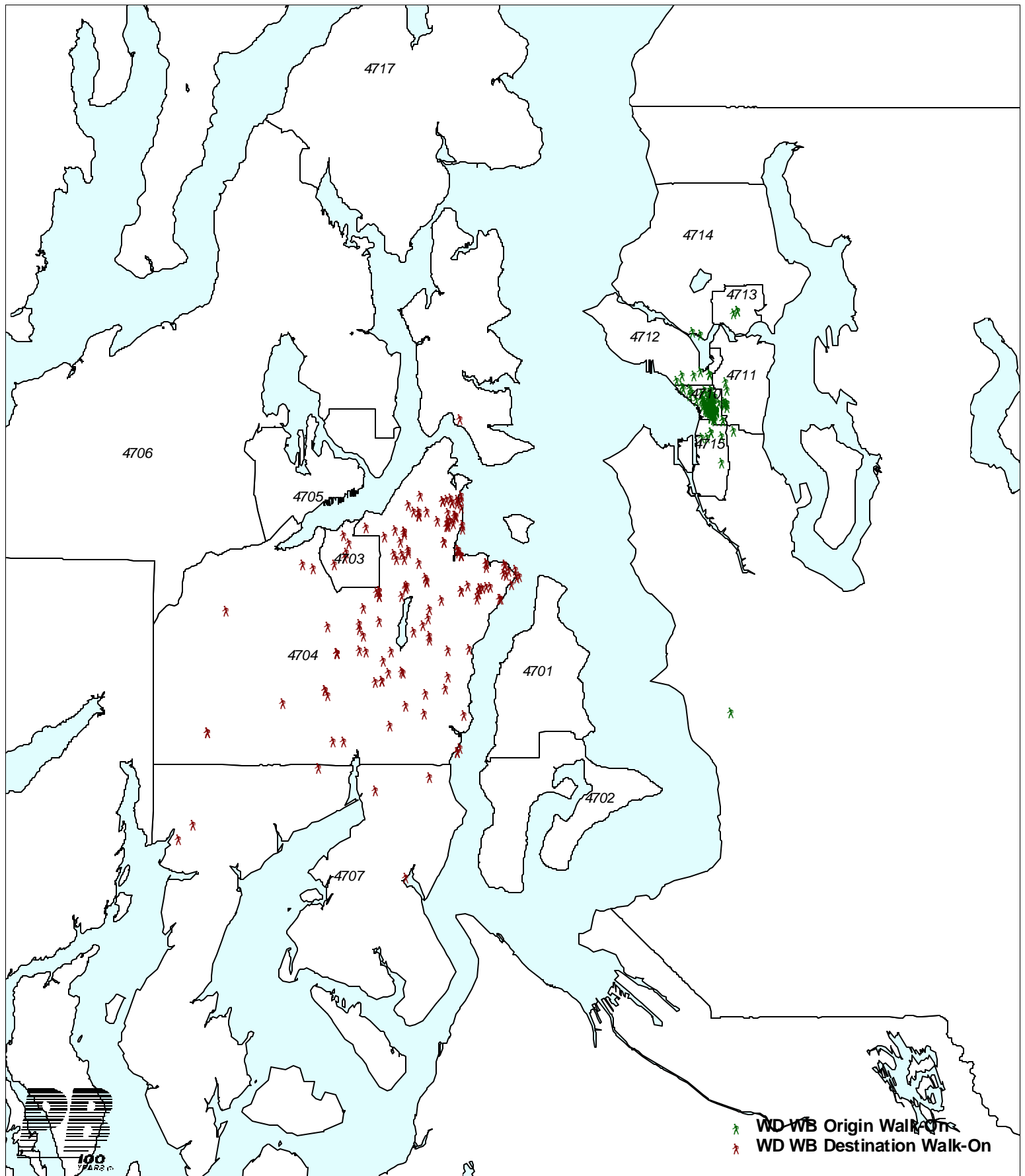


Figure 9-8
Seattle - Southworth via Vashon Eastbound PM Peak Period
Trip Origins & Destinations

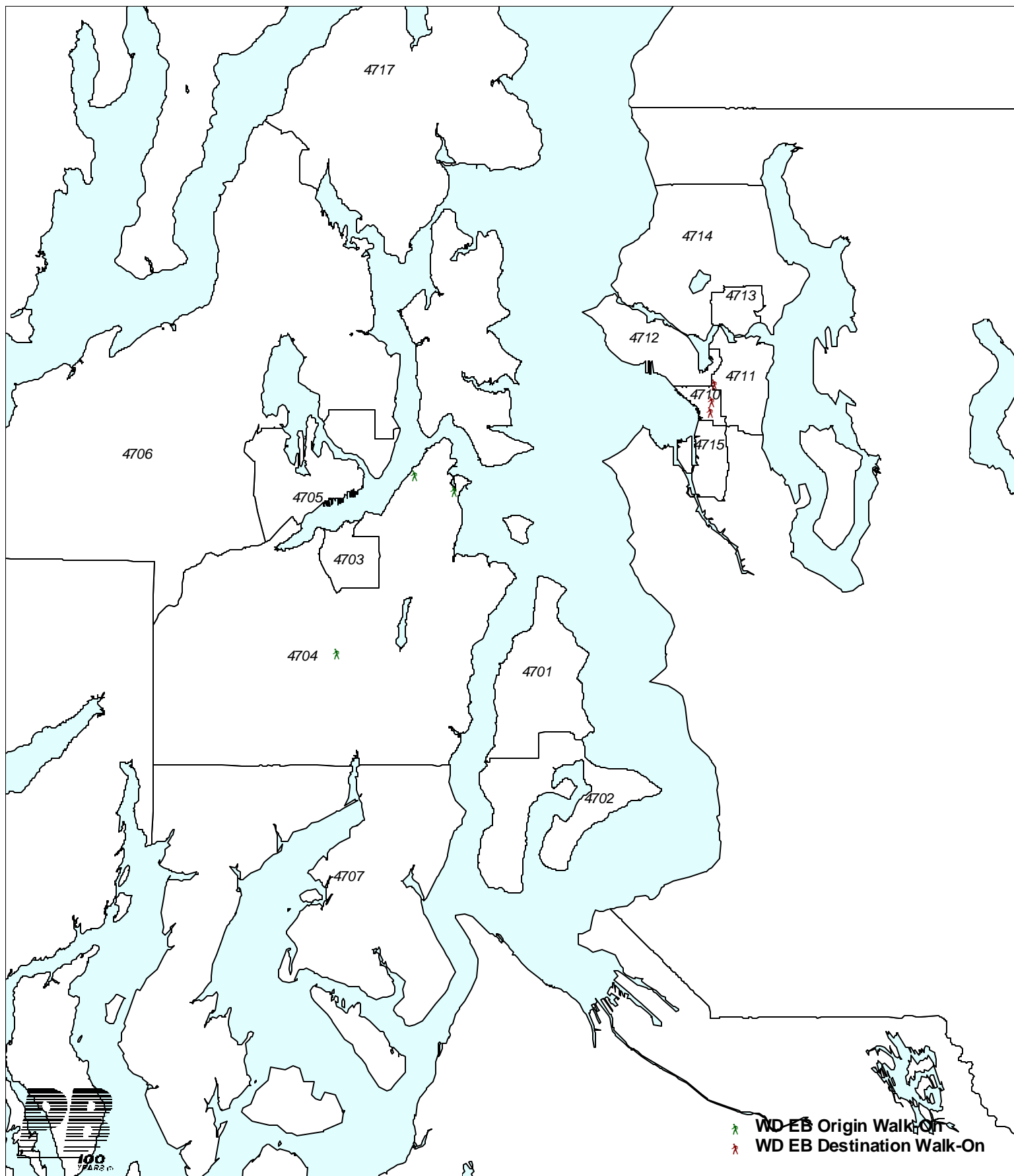


Figure 9-9
Seattle - Vashon & Seattle - Southworth Combined Westbound PM Peak Period
Trip Origins & Destinations

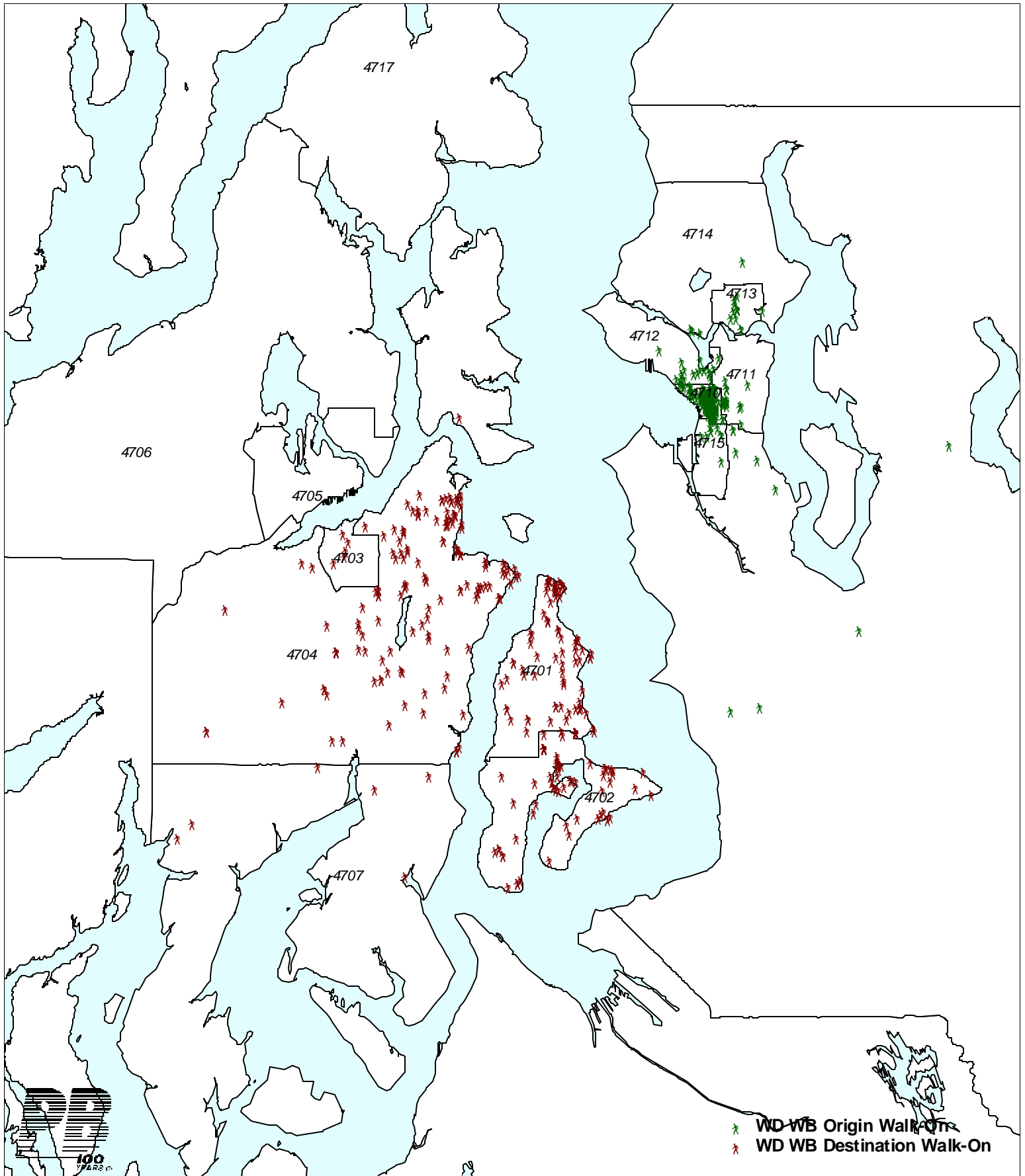


Figure 9-10
Seattle - Vashon & Seattle - Southworth Combined Eastbound PM Peak Period
Trip Origins & Destinations

